

Moore

#10  
LW/M

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/147,947A

1652

DATE: 02/01/2000  
TIME: 14:05:12

Input Set: I147947A.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

ENTERED

1 <110> APPLICANT: TSURUOKA, Nobuo  
2 YAMASHIRO, Kyoko  
3 YAMAGUCHI, Nozomi  
4 <120> TITLE OF INVENTION: Novel Serine Protease  
5 <130> FILE REFERENCE: 001560-349  
6 <140> CURRENT APPLICATION NUMBER: US/09/147,947A  
7 <141> CURRENT FILING DATE: 1997-03-24  
8 <150> EARLIER APPLICATION NUMBER: PCT/JP98/03324  
9 <151> EARLIER FILING DATE: 1998-07-24  
10 <150> EARLIER APPLICATION NUMBER: JP 9/213969  
11 <151> EARLIER FILING DATE: 1997-07-24  
12 <160> NUMBER OF SEQ ID NOS: 6  
13 <170> SOFTWARE: PatentIn Ver. 2.0  
14 <210> SEQ ID NO 1  
15 <211> LENGTH: 20  
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17 <213> ORGANISM: Artificial Sequence  
18 <220> FEATURE:  
19 <223> OTHER INFORMATION: Description of Artificial Sequence:Synthetic DNA  
20 <220> FEATURE:  
21 <221> NAME/KEY: misc\_feature  
22 <222> LOCATION: (9)..(12)  
23 <223> OTHER INFORMATION: Nucleotides 9 and 12 are n wherein n = any  
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28 <211> LENGTH: 20  
29 <212> TYPE: DNA  
30 <213> ORGANISM: Artificial Sequence  
31 <220> FEATURE:  
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34 <221> NAME/KEY: misc\_feature  
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42 <212> TYPE: DNA  
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44 <220> FEATURE:

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w--> OK

PAGE: 2

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION US/09/147,947A**

DATE: 02/01/2000  
 TIME: 14:05:12

Input Set: I147947A.RAW

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49	cggggctgg	gacagcaggg	cgccggcgcg	agcgtgggag	ggggctctag	gactctgccc	180	
50	gcccccccc	gccccctccg	cggggaccgg	gagccccagca	tggaccacac	tcggcgccgc	240	
51	agcc atg	gct ctc	gcc cgc	tgc gtg	ctg gct	gtg att	289	
52	Met Ala	Leu Ala	Arg Cys	Val Leu	Ala Val	Ile Leu Gly	Ala Leu	
53	1	5			10		15	
54	tct gta	gtg gcc	cgc gct	gat ccg	gtc tcg	cgc tct	ccc ctt	337
55	Ser Val	Val Ala	Arg Ala	Asp Pro	Val Ser	Arg Ser	Pro Leu His Arg	
56	20				25		30	
57	ccg cat	ccg tcc	cca ccg	cgt tcc	caa cac	gct cac	ttt ccc agc	385
58	Pro His	Pro Ser	Pro Pro	Arg Ser	Gln His	Ala His	Tyr Leu Pro Ser	
59	35				40		45	
60	tcg cgg	ccg cca	ccc agg	acc ccg	cgc ttc	ccg ctc	ccg ctg	433
61	Ser Arg	Arg Pro	Pro Pro	Arg Thr	Pro Arg	Phe Pro	Leu Pro Arg Ile	
62	50				55		60	
63	ccc gct	gcc cag	cgc ccg	cag gtc	ctc agc	acc ggg	cac acg	481
64	Pro Ala	Ala Gln	Arg Pro	Gln Val	Leu Ser	Thr Gly	His Thr Pro Pro	
65	65			70		75		
66	acg att	cca cgc	cgc tgc	ggg gca	gga gag	tcg tgg	ggc aat	529
67	Thr Ile	Pro Arg	Arg Cys	Gly Ala	Gly Glu	Ser Trp	Gly Asn Ala Thr	
68	80			85		90		95
69	aac ctc	ggc gtc	ccg tgt	cta cac	tgg gac	gag gtg	ccg ccc ttc	577
70	Asn Leu	Gly Val	Pro Cys	Leu His	Trp Asp	Glu Val	Pro Pro Phe Leu	
71	100			105		110		
72	gag cgg	tcg ccc	ccg gcc	agt tgg	gct gag	ctg cga	ggg cag	625
73	Glu Arg	Ser Pro	Ala Ser	Trp Ala	Glu Leu	Arg Gly	Gln Pro His	
74	115			120		125		
75	aac ttc	tgc cgg	agc ccg	gat ggc	tcg ggc	aga cct	tgg tgc	673
76	Asn Phe	Cys Arg	Ser Pro	Asp Gly	Ser Gly	Arg Pro	Trp Cys Phe Tyr	
77	130			135		140		
78	cggtttt	ccggccg	tttccc	tttgcatt	ccgcctt	tttgggtt	tttgggg	721
79	Arg Asn	Ala Gln	Gly Lys	Val Asp	Trp Gly	Tyr Cys	Asp Cys Gly Gln	
80	145			150		155		
81	ggc ccg	ccg ttg	ccc gtc	att cgc	ctt gtt	ggg aac	agt ggg cat	769
82	Gly Pro	Ala Leu	Pro Val	Ile Arg	Leu Val	Gly Gly	Asn Ser Gly His	
83	160			165		170		175
84	gaa ggt	cga gtg	gag ctg	tac cac	gct ggc	cag tgg	ggg acc atc	817
85	Glu Gly	Arg Val	Glu Leu	Tyr His	Ala Gly	Gln Trp	Gly Thr Ile Cys	
86	180			185		190		
87	gac gac	caa tgg	gac aat	gca gac	gca gac	gtc atc	tgt agg cag	865
88	Asp Asp	Gln Trp	Asp Asn	Ala Asp	Ala Asp	Val Ile	Cys Arg Gln Leu	
89	195			200		205		
90	ggg ctc	agt ggc	att gcc	aaa gca	tgg cat	cag gca	cat ttt	913
91	Gly Leu	Ser Gly	Ile Ala	Lys Ala	Trp His	Gln Ala	His Phe Gly Glu	
92	210			215		220		
93	gga tct	ggc cca	ata ttg	ttg gat	gaa gta	cgc tgc	acc gga aac gag	961
94	Gly Ser	Gly Pro	Ile Leu	Leu Asp	Glu Val	Arg Cys	Thr Gly Asn Glu	

PAGE: 3

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION US/09/147,947A**

 DATE: 02/01/2000  
 TIME: 14:05:12

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97	Leu Ser Ile Glu Gln Cys Pro Lys Ser Ser Trp Gly Glu His Asn Cys			
98	240	245	250	255
99	ggc cat aaa gaa gat gct gga gtg tct tgt gtt cct cta aca gat ggt			1057
100	Gly His Lys Glu Asp Ala Gly Val Ser Cys Val Pro Leu Thr Asp Gly			
101	260	265	270	
102	gtc atc aga ctg gca gga gga aaa agt acc cat gaa ggt cgc ctg gag			1105
103	Val Ile Arg Leu Ala Gly Gly Lys Ser Thr His Glu Gly Arg Leu Glu			
104	275	280	285	
105	gtc tac tac aag ggg cag tgg ggg aca gtc tgt gat gat ggc tgg act			1153
106	Val Tyr Tyr Lys Gly Gln Trp Gly Thr Val Cys Asp Asp Gly Trp Thr			
107	290	295	300	
108	gag atg aac aca tac gtg gct tgt cga ctg ctg gga ttt aaa tac ggc			1201
109	Glu Met Asn Thr Tyr Val Ala Cys Arg Leu Leu Gly Phe Lys Tyr Gly			
110	305	310	315	
111	aaa cag tcc tct gtg aac cat ttt gat ggc agc aac agg ccc ata tgg			1249
112	Lys Gln Ser Ser Val Asn His Phe Asp Gly Ser Asn Arg Pro Ile Trp			
113	320	325	330	335
114	ctg gat gac gtc agc tgc tca gga aaa gaa gtc agc ttc att cag tgt			1297
115	Leu Asp Asp Val Ser Cys Ser Gly Lys Glu Val Ser Phe Ile Gln Cys			
116	340	345	350	
117	tcc agg aga cag tgg gga agg cat gac tgc agc cat aga gaa gat gtg			1345
118	Ser Arg Arg Gln Trp Gly Arg His Asp Cys Ser His Arg Glu Asp Val			
119	355	360	365	
120	ggc ctc acc tgc tat cct gac agc gat gga cat agg ctt tct cca ggt			1393
121	Gly Leu Thr Cys Tyr Pro Asp Ser Asp Gly His Arg Leu Ser Pro Gly			
122	370	375	380	
123	ttt ccc atc aga cta gtg gat gga gag aat aag aag gaa gga cga gtg			1441
124	Phe Pro Ile Arg Leu Val Asp Gly Glu Asn Lys Lys Glu Gly Arg Val			
125	385	390	395	
126	gag gtt ttt gtc aat ggc caa tgg gga aca atc tgc gat gac gga tgg			1489
127	Glu Val Phe Val Asn Gly Gln Trp Gly Thr Ile Cys Asp Asp Gly Trp			
128	400	405	410	415
129	acc gat aag cat gca gct gtg atc tgc cgg cag ctt ggc tat aag ggt			1537
130	Thr Asp Lys His Ala Ala Val Ile Cys Arg Gln Leu Gly Tyr Lys Gly			
131	420	425	430	
132	cct gcc aga gca agg act atg gct tat ttt ggg gaa gga aaa ggc ccc			1585
133	Pro Ala Arg Ala Arg Thr Met Ala Tyr Phe Gly Glu Gly Lys Gly Pro			
134	435	440	445	
135	atc cac atg gat aat gtg aag tgc aca gga aat gag aag gcc ctg gct			1633
136	Ile His Met Asp Asn Val Lys Cys Thr Gly Asn Glu Lys Ala Leu Ala			
137	450	455	460	
138	gac tgt gtc aaa caa gac att gga agg cac aac tgc cgc cac agt gag			1681
139	Asp Cys Val Lys Gln Asp Ile Gly Arg His Asn Cys Arg His Ser Glu			
140	465	470	475	
141	gat gca gga gtc atc tgt gac tat tta gag aag aaa gca tca agt agt			1729
142	Asp Ala Gly Val Ile Cys Asp Tyr Leu Glu Lys Lys Ala Ser Ser Ser			
143	480	485	490	495
144	ggt aat aaa gag atg ctc tca tct gga tgt gga ctg agg tta ctg cac			1777

PAGE: 4

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/147,947ADATE: 02/01/2000  
TIME: 14:05:12

Input Set: I147947A.RAW

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 146 500 505 510  
 147 cgt cg<sup>g</sup> cag aaa cg<sup>g</sup> atc att ggt ggg aac aat tct tta agg ggt gcc 1825  
 148 Arg Arg Gln Lys Arg Ile Ile Gly Gly Asn Asn Ser Leu Arg Gly Ala  
 149 515 520 525  
 150 tgg cct tgg cag gct tcc ctc agg ctg agg tcg gcc cat gga gac ggc 1873  
 151 Trp Pro Trp Gln Ala Ser Leu Arg Leu Arg Ser Ala His Gly Asp Gly  
 152 530 535 540  
 153 agg ctg ctt tgt gga gct acc ctt ctg agt agc tgc tgg gtc ctg aca 1921  
 154 Arg Leu Leu Cys Gly Ala Thr Leu Leu Ser Ser Cys Trp Val Leu Thr  
 155 545 550 555  
 156 gct gca cac tgc ttc aaa agg tac gga aac aac tcg agg agc tat gca 1969  
 157 Ala Ala His Cys Phe Lys Arg Tyr Gly Asn Asn Ser Arg Ser Tyr Ala  
 158 560 565 570 575  
 159 gtt cga gtt ggg gat tat cat act ctg gta cca gag gag ttt gaa caa 2017  
 160 Val Arg Val Gly Asp Tyr His Thr Leu Val Pro Glu Glu Phe Gln  
 161 580 585 590  
 162 gaa ata ggg gtt caa cag att gtg att cac agg aac tac agg cca gac 2065  
 163 Glu Ile Gly Val Gln Gln Ile Val Ile His Arg Asn Tyr Arg Pro Asp  
 164 595 600 605  
 165 aga agc gac tat gac att gcc ctg gtt aga ttg caa gga cca ggg gag 2113  
 166 Arg Ser Asp Tyr Asp Ile Ala Leu Val Arg Leu Gln Gly Pro Gly Glu  
 167 610 615 620  
 168 caa tgt gcc aga cta agc acc cac gtt ttg cca gcc tgt tta cct cta 2161  
 169 Gln Cys Ala Arg Leu Ser Thr His Val Leu Pro Ala Cys Leu Pro Leu  
 170 625 630 635  
 171 tgg aga gag agg cca cag aaa aca gcc tcc aac tgt cac ata aca gga 2209  
 172 Trp Arg Glu Arg Pro Gln Lys Thr Ala Ser Asn Cys His Ile Thr Gly  
 173 640 645 650 655  
 174 tgg gga gac aca ggt cgt gcc tac tca aga act cta caa caa gct gct 2257  
 175 Trp Gly Asp Thr Gly Arg Ala Tyr Ser Arg Thr Leu Gln Gln Ala Ala  
 176 660 665 670  
 177 gtg cct ctg tta ccc aag agg ttt tgt aaa gag agg tac aag gga cta 2305  
 178 Val Pro Leu Leu Pro Lys Arg Phe Cys Lys Glu Arg Tyr Lys Gly Leu  
 179 675 680 685  
 180 ttt act ggg aga atg ctc tgt gct ggg aac ctc caa gaa gac aac cgt 2353  
 181 Phe Thr Gly Arg Met Leu Cys Ala Gly Asn Leu Gln Glu Asp Asn Arg  
 182 690 695 700  
 183 gtg gac agc tgc cag gga gac agt gga gga cca ctc atg tgt gaa aag 2401  
 184 Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Met Cys Glu Lys  
 185 705 710 715  
 186 cct gat gag tcc tgg gtt gtg tat ggg gtg act tcc tgg ggg tat gga 2449  
 187 Pro Asp Glu Ser Trp Val Val Tyr Gly Val Thr Ser Trp Gly Tyr Gly  
 188 720 725 730 735  
 189 tgt gga gtc aaa gac act cct gga gtt tat acc aga gtc ccc gcc ttt 2497  
 190 Cys Gly Val Lys Asp Thr Pro Gly Val Tyr Thr Arg Val Pro Ala Phe  
 191 740 745 750  
 192 gta cct tgg ata aaa agt gtc acc agt ctg taacttatgg aaagctcaag 2547  
 193 Val Pro Trp Ile Lys Ser Val Thr Ser Leu  
 194 755 760

PAGE: 5

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION US/09/147,947A**

 DATE: 02/01/2000  
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Input Set: I147947A.RAW

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 205           20           25           30  
       His Pro Ser Pro Pro Arg Ser Gln His Ala His Tyr Leu Pro Ser Ser  
 206           35           40           45  
       Arg Arg Pro Pro Arg Thr Pro Arg Phe Pro Leu Pro Leu Arg Ile Pro  
 207           50           55           60  
       Ala Ala Gln Arg Pro Gln Val Leu Ser Thr Gly His Thr Pro Pro Thr  
 208           65           70           75           80  
       Ile Pro Arg Arg Cys Gly Ala Gly Glu Ser Trp Gly Asn Ala Thr Asn  
 209           85           90           95  
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 210           100          105          110  
       Arg Ser Pro Pro Ala Ser Trp Ala Glu Leu Arg Gly Gln Pro His Asn  
 211           115          120          125  
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 212           130          135          140  
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 213           145          150          155          160  
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 215           180          185          190  
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 216           195          200          205  
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 217           210          215          220  
       Ser Gly Pro Ile Leu Leu Asp Glu Val Arg Cys Thr Gly Asn Glu Leu  
 218           225          230          235          240  
       Ser Ile Glu Gln Cys Pro Lys Ser Ser Trp Gly Glu His Asn Cys Gly  
 219           245          250          255  
       His Lys Glu Asp Ala Gly Val Ser Cys Val Pro Leu Thr Asp Gly Val  
 220           260          265          270  
       Ile Arg Leu Ala Gly Gly Lys Ser Thr His Glu Gly Arg Leu Glu Val  
 221           275          280          285  
       Tyr Tyr Lys Gly Gln Trp Gly Thr Val Cys Asp Asp Gly Trp Thr Glu  
 222           290          295          300  
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PAGE: 6

**VERIFICATION SUMMARY**  
**PATENT APPLICATION US/09/147,947A**

DATE: 02/01/2000  
TIME: 14:05:12

Input Set: I147947A.RAW

Line ? Error/Warning

Original Text

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